Thus, it could be useful to assess surgical treatment based on frailty rather than age alone.

Introduction/Background
In the randomized phase II Neo-PembroV study (NCT03275506), Pembrolizumab in combination with neoadjuvant chemotherapy (NACT) met its primary endpoint of complete debulking rate (CRR) for the treatment of patients with advanced up-front non-resectable high-grade serous ovarian cancer (HGSO). However, the CRR in the control group was similar. Identification of potential predictive biomarkers is fundamental to better understand the place of Pembrolizumab in this setting.

Methodology
91 Patients (pts) with HGSO unable to receive complete upfront debulking surgery were included and received Carboplatin (AUC5) Q3W + Paclitaxel (175mg/m²) Q3W +/- Pembrolizumab 200 mg Q3W IV before and after surgery. Pembrolizumab was given until 24 months maximum. After interval debulking surgery, optional bevacizumab was given until 24 months maximum. After interval debulking surgery, optional bevacizumab was given until 24 months maximum.

Result(s)
BRCA1/2 mutation status (BRCA) was assessed using standard algorithms. Immunohistochemical PD-L1 expression was evaluated on both tumour and immune cells (IC) using the Ventana SP263 assay. Associations of progression-free survival (PFS) with BRCA, and PD-L1 expression were evaluated.

Result(s)
BRCA status was available for 81 pts (89%). Of 30 pts (10%) in the control arm harboured a BRCA mutation (mBRCA) versus 13/61 in the experimental arm (21.3%). Median PFS (mPFS) in both arms in the BRCA wild-type (wtBRCA) subgroup were not different (mPFS 19.8 months [95% CI, 13.0–26.4] vs 17.4 months [95% CI, 11.2–24.7]) in control and experimental arms respectively. mPFS in the mBRCA subgroup were not reached in both arms. PD-L1 expression was available for 81/91 patients (90.4%). PD-L1 IC ≥5% was positive in 29/82 patients (35.4%) and correlated to mPFS in the whole population (18.2 months PDL1 IC<5% vs 23.4 months PDL1 IC ≥5% respectively, \textit{p}=0.02). mPFS was
similar HR: 1.39 [0.71-2.74] in patients with PD-L1 IC<5% (mPFS 19.3mo [14.9-25.7] vs mPFS 18.2mo [14.5-19.3] in control and experimental arms respectively). Pembrolizumab improved mPFS (HR: 0.56 [0.19-1.61]) for pts with PD-L1 ≥5% (mPFS 20.8mo [9.5-NE] vs mPFS 23.4mo [18.0-NE] in control and experimental arms respectively).

Conclusion* If no benefit in adding Pembrolizumab to CT +/- bevacizumab was found in wt BRCA subgroup, exploratory PFS analyses in the PD-L1 IC ≥5% subgroup showed a trend favouring Pembrolizumab in patients with advanced HGSOC.

**263** PROGNOSTIC IMAGE-BASED QUANTIFICATION OF CD8CD103 T CELL SUBSETS IN HIGH-GRADE SEROUS OVARIAN CANCER PATIENTS

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Introduction/Background* CD103-positive tissue resident memory-like CD8+ T cells (CD8CD103 TRM) are associated with improved prognosis across malignancies, including high-grade serous ovarian cancer (HGSOC). We investigated whether quantification of CD8, CD103 or both is required to improve existing survival prediction and whether all HGSOC patients or only specific subgroups of patients benefit from infiltration.

Methodology We applied image-based quantification of CD8 and CD103 multiplex immunohistochemistry in the intratumoral and stromal compartments of 268 advanced-stage HGSOC patients from two independent clinical institutions.

Result(s)* Infiltration density of CD8CD103 TRM was independent of clinicopathological factors and primary treatment strategy. A survival benefit of CD8CD103 TRM infiltration was observed in patients treated with primary cytoreductive surgery. Moreover, survival benefit in this group was limited to patients with no macroscopic tumor lesions after surgery (high epithelial CD8CD103 TRM infiltration 5 year survival 83% versus 52%, p=0.03; high stromal CD8CD103 TRM 5 year survival 77% versus 54%, p=0.01). No effect of CD8CD103 TRM infiltration on overall survival was observed in patients treated with neo-adjuvant chemotherapy, with or without macroscopic tumor lesions after surgery (high epithelial CD8CD103 TRM infiltration, p=0.77; high stromal CD8CD103 TRM infiltration, p=0.32).

Conclusion* Our results suggest CD8CD103 TRM quantification as a superior method for prognostication compared to single CD8 or CD103 quantification, and supports the further exploration of image-based quantification of CD8CD103 TRM in HGSOC. This approach provides novel insights into...